GUNNISON CITY WATER MANAGEMENT & CONSERVATION PLAN 2018

December 2018

PREPARED BY:
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SUNRISE ENGINEERING

GUNNISON CITY

WATER MANAGEMENT & CONSERVATION PLAN 2018

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1.0 INTRODUCTION

Gunnison City is concerned about the future cost and/or availability of a finite supply of water in the surrounding area. Concerns about statewide water supplies have been demonstrated by the State Legislature as shown by the Water Conservation Plan Act (House Bill 71) passed and revised in the 2004 legislative session (Section 73-10-32 Utah Code Annotated). This document constitutes the 2018 update to the water conservation plan for Gunnison City.

Gunnison achieved a major success in reducing essentially unaccounted water losses by completion of a recent culinary water project, which replaced several thousand feet of old cast iron piping. Prior to the project, the City had a very difficult time keeping their tanks full during peak demand periods during the summer due to leakage that was suspected throughout the system. In addition to unknown distribution system leaks, the water operator was repairing major leaks in the system at the rate of one or more each week.

It was impossible to quantify the actual losses due to the leakage, because it was suspected many of the old service meters in the system were suspected to be inaccurate. Once the project was completed, there was immediate improvement observed by the water operators due to the significantly reduced run time on the well pumps.

2.0 BACKGROUND INFORMATION

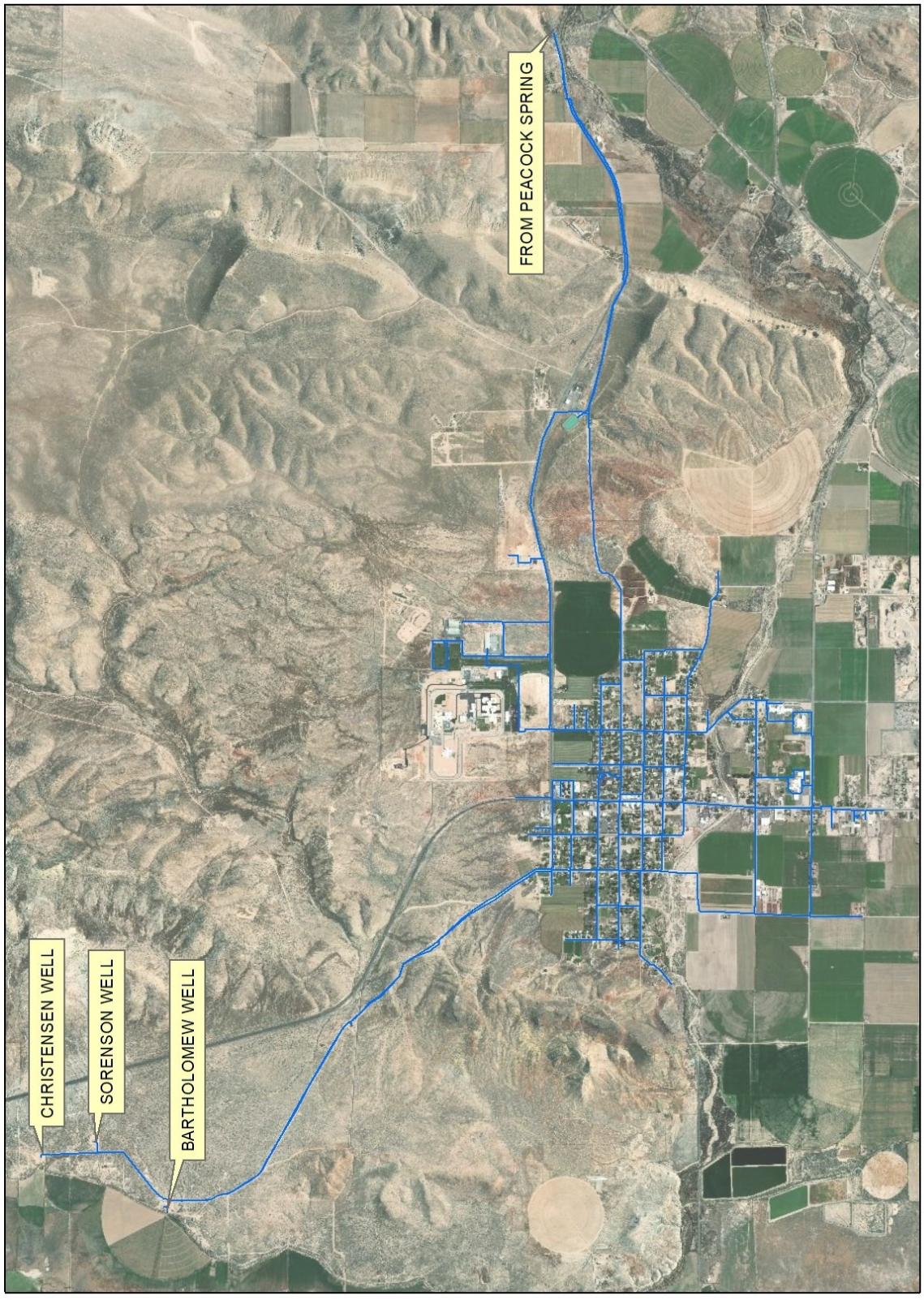
An area map of the Gunnison water service area page 2. Located in Sanpete County, Gunnison City is growing with new homes and subdivisions being added to accommodate the growth. The 2010 census established the population of Gunnison City at 3,285.

The population of the State Prison, located at Gunnison is currently 1,698 inmates, and those inmates are included in the local census population. Over the years, since the prison was constructed, it has been expanded several times, and population of the prison has increased. The increase in the prison population results in increases in the local population due to an increase in jobs available in the area. The prison is staffed 24 hours per day with 155 personnel per shift.

Since Gunnison City provides water to the prison, the demands on the City's water system have increased in proportion to both the increase in the prison population and the increase in the local population. The 2018 population is estimated at 3,473, which is used as the base population for projections in this report. (See Appendix A)

Gunnison City's culinary water system currently provides water to 712 connections. The 712 connections include 628 residential, 71 commercial 12 county connections, and 1 connection for the State Prison. Secondary pressurized irrigation water is available to all but 12 residential connections on the Gunnison system. (See Appendix A.)

GUNNISON WATER SERVICE AREA



The Division of Drinking Water uses the term Equivalent Residential Connections (ERC(s)) to equate culinary water use by commercial, agricultural, and institutional customers to that used by residential customers. One ERC is defined as the amount of culinary water required by an average residential connection. A residential connection is assumed to always equal 1 ERC in calculations. It was determined for the last Gunnison City Culinary Water Master Plan that the average residential use was 9,248 gallons per month per connection. Therefore, one Gunnison City ERC represents 9,248 gallons per month.

Based on the data from the master plan an average commercial connection represented 2.38 ERCs and the average county/agricultural connection represented approximately 5.22 ERCs. The State Prison, considered an institutional connection, is by far the largest user of culinary water in Gunnison City. That connection represented 680 ERC, which, when divided by 1,500 inmates at the time of Master Plan preparation is rounded to 0.453 ERC per inmate. (See Appendix A.)

In recognition of the City's culinary water system needs, Gunnison City recently completed a major culinary water project to upgrade pipelines and increase both available source capacity and storage capacity. In addition, new meters were installed throughout the system. City leaders understand that a well-maintained and properly operated water system provides citizens with water where and when it is needed. As noted in the introduction, prior to the water project, the City was losing a large amount of water to system leaks.

3.0 EXISTING RESOURCES

Gunnison culinary water system meters are read each month throughout the year. During the past 12 months from November 1 of 2017 to October 31 of 2018 Gunnison City used 185,418,000 gallons or 569 acre feet of water in its culinary water system. A culinary water usage chart is provided in Appendix D, showing culinary water use in acre feet each month.

Gunnison City currently owns 1,510.4 acre feet with a flow limitation of 3.155 cfs of culinary water rights from water right numbers 63-358, 63-2512, 63-3376. These water rights were combined in the approved change application (a40431), such that the City's municipal water can be withdrawn from each any or all of its sources.

Gunnison City currently has four sources of supply for its culinary water system. These sources are Bartholomew well, Christensen Well, and Sorensen well, all located approximately 3 miles northwest of Gunnison City center. Bartholomew Well provides 850 gpm, Christensen well provides 200 gpm and Sorensen Well currently provides an additional 300 gpm.

The fourth source of water to the culinary system Peacock spring located near Sterling, Utah. Peacock spring flows fluctuate from summer to winter with a minimum flow of 150 gpm, which occurs during the winter. Summer spring flow is generally over 300 gpm, which is an advantage to the City because the higher spring flow corresponds to the highest demand period. Since the City currently has surplus culinary water available from the wells, and due to the foul taste and smell of the spring water, the spring is currently used to augment the pressurized secondary water system. Non-potable secondary water is provided from Gunnison Irrigation Company.

Gunnison City currently has 982 shares of irrigation water in the Gunnison Irrigation Company. This water is used in a pressurized secondary irrigation system that is available for all but 12 residential lots in Gunnison City, including vacant lots. The irrigated area of the average city lot is about ¼ acre. According to the State of Utah Rules for Public Drinking Water Systems, 1.66 acre-ft. per irrigated acre should be the yearly demand for residential irrigation in Gunnison's Climate Zone. Since the water is assumed to be sprinkler applied, an efficiency factor of 0.7 is used and the actual average yearly amount of water needed for the year would be 2.37 ac.-ft. per irrigated acre.

The amount of secondary water that the irrigation company delivers per share depends on the amount of water available to the irrigation company each year. The amount of water available to the irrigation company is divided equally between all irrigation company shares through a system of weir cutouts along the canal. The more water that is carried in the canal, the deeper the water level as it flows over the weir and the more water that will be is cut out for share-holders. This system determines the amount that will be delivered by irrigation company customers on a per share basis and varies during drought and wet years.

During a normal water year, the irrigation company would deliver 0.5 ac.-ft. per day per 100 shares over the 180 day irrigation season. On that basis Gunnison City's secondary water amounts to 0.9 ac.-ft. per share that would be available to be used during the irrigation season.

As noted above, the irrigated area of the average city lot is assumed to be ¼ acre. In Appendix B, the required value of 2.37 acre feet per acre is assigned. If we divide 2.37 acre feet per acre by 4 lots per acre, then 0.6 acre feet should provide an adequate amount of water to irrigate each lot through the course of a year. If an average of one share is provided per lot, there is adequate irrigation water available for the average lot in a normal water year. Based on this usage, the calculation in Appendix E shows that Gunnison City residential connections would use an average of 369.6 acre feet of irrigation water. In a normal year if residents do not overwater, 369.6 acre feet would be sufficient, and there will be a surplus available. When the pressurized irritation system pond is full, surplus water can overflow from the pond if necessary, but Gunnison City has installed automatic valves that shut off water to the pond when it is full so the surplus water can be used by the farmers and is not wasted.

When irrigation water is available, the residents use it first, but culinary water is used by residents to supplement the irrigation water during hotter months, especially during dry years, unless it is restricted due to shortage. During this ongoing drought cycle, the irrigation company has not been able to deliver anywhere near the 884 acre feet that their shares equal in a normal year. This past summer the irrigation water was essentially gone in June, so residents used more culinary water for irrigation than normal.

To conserve water, no outside watering with either culinary or secondary water is allowed in Gunnison City between 10:00 AM and 6:00 PM. Further restrictions are imposed on the use of culinary water outside as needed to protect the culinary water system during times of shortage.

Although culinary water usage restriction is uncommon, it has happened in the past. Irrigation water is rationed when needed as a result of drought related shortages.

The City requires all developers of new lots or builders on existing lots that do not have irrigation shares available to provide two shares of irrigation water per acre for use in the City before the lot is approved for development. Due to this requirement, it is assumed that there will be no more than 12 residential connections now and in the future that do not have secondary irrigation water available to meet their outdoor watering needs. This matches the observations from the 2013 Water Management & Conservation Plan (WMCP).

Table 3 – 2 below shows the estimated total water, culinary and secondary used in Gunnison during the twelve months ending on October 31, 2018. (A water usage calculation is provided in Appendix D). Table 3 – 2 also shows that Per Capita use in Gunnison was 234 gallons per person per day.

TABLE 3 – 2

	Residential	**Commercial, Institutional, and Agricultural**	**Estimated Secondary**	**Total Water Used**
Culinary Water Used	60,840,000 Gal. 187 Ac.-Ft.	124,578,000 Gal. 382 Ac.-Ft.		185,418,000 Gal. 569 Ac.-Ft.
Secondary Water Used			120,426,000 Gal. 370 Ac.-Ft.	117,624,000 Gal. 361 Ac.-Ft. Est.
Previous 12 Month Total Gunnison City Water Used				**305,844,000 Gal. 939 ac-ft.**

Gunnison City Population	**Gallons Used Per Person Per Day**
3,473	**241**

Gunnison City uses culinary water for irrigation of the City Park and the City Cemetery. A very close approximation of the area irrigated is 20 acres. The amount of water applied per acre was calculated in the 2012 Culinary Water Master Plan. This data is unchanged since the last WMCP update The calculations from Appendix C showed that the City was applying 4.20 acre feet per acre to the park and cemetery during the 6 month irrigation season.

4.0 CURRENT AND FUTURE WATER USE

Since 2008 Gunnison City the population and connection growth rate has remained at less than 1% per year. The census population in 2010 was 3285, including a prison inmate population of 1,500. Using a 1% growth rate since 2008 and projecting it to 2013, the population in 2013 should be 3,557, but the actual population as stated by City Staff is 3,473. Never the less, a 1% average growth rate is not excessive and is used to project the population and connection growth for this report. When projecting the current population and connections at a 1% per year average

rate of growth into the future for 20 years, the total population would expand to 4,238 and the number of system connections would increase to 868. When projected for 50 years, the total population would be increased to 5,712 and the number of connections would be increased to 1,170. Refer to the Population and Connection Data in Appendix A.

According to the current required culinary water right calculations in Appendix B, Current and Projected Water Right Data, which are based on the requirements of the Utah Rules for Public Drinking Water Systems, Gunnison City currently requires 730 acre feet of culinary water right. During fiscal year 2012 Gunnison City used approximately 569 acre feet of water from the culinary water system, including water used for both indoor and outdoor purposes. This is 78% of the amount of culinary water that would be expected based on the required water right calculation. This shows a conservative attitude on the part of the Gunnison City residents, and is consistent with the findings in the WMCP from 2013.

It should be noted that the current per-capita use of 241 gallons per day (gpcd) is up by 7 gallons per day from 234 gpcd in the 2013 conservation plan. This is consistent with 2010 data found on the Utah Division of Water Resources website which indicated that the average overall water use throughout the State. Visit www.water.utah.gov for more information. The increase in overall use may be due to the severe drought conditions that have persisted in Sanpete County this past summer, but it is more likely due to more accurate meter readings from the new meters installed during the water project.

More importantly, the statewide average indoor usage for culinary water is 60 gpcd. This figure is from data found on the Utah Division of Water Resources website. Visit www.water.utah.gov for more information. However, as calculated in Appendix D, Culinary Water Usage (& Estimated Secondary) current average daily indoor water use for the past year was 39.73 gpcd. That is also up slightly from the 39.09 gpcd documented in the 2013 WMCP, which is also likely due to more accurate meter readings from the new meters installed during the water project.

The greatest incentive for conservation in a small city in Utah seems to be the cost of the water. Gunnison City raised tis water rates for the second time in five years in 2017. The current culinary water base rate is $33.00 per month for customers in the City limits and $42.00 for customers outside the city limits, which currently includes 4,000 gallons of water. The City has a stepped culinary water overage schedule with the top scale level charge of $5.50 per 1,000 gallons. A copy of the most recent resolution setting the current culinary water rates is provided in Appendix G. The City charges a maintenance fee for secondary irrigation customers based on the number of shares. The fee averages $5.80 per month per connection.

According to the projected required water right calculations in Appendix B, it is estimated that the City may require 1,010 ac-ft of culinary water in 2038 and 1,316 acre feet in 2068. However, if we apply the conservation factor of 0.78 that was observed during the past year, the projected usage would actually be 788 acre feet in 2038 and 1,026 acre feet in 2068.

As previously noted, Gunnison City currently owns 1,510 acre feet of municipal water right which is planned for use in the culinary system (see Appendix B).

In the past 12 months the City was estimated to have used 370 acre feet of secondary irrigation water based on a normal year of available water from the irrigation company. The actual usage was most likely much lower than the estimate, because this past summer was a year of exceptional drought throughout Sanpete County. However, there is no means of accurately measuring the amount of secondary water actually used. It should be noted that the pressurized irrigation pond was shut off several times a week during the irrigation season to allow the pond to fill with only a small amount or no water available from the irrigation company supplemented by reduced flows from peacock spring.

A projection of secondary water required, based solely on normal year quantities using a 1% average annual rate of growth would be 451 acre feet in 20 years and 609 acre feet in 50 years. This should serve the City adequately if it continues the current practice of collecting two additional shares of irrigation water from the developers per acre developed.

5.0 WATER PROBLEMS, CONSERVATION GOALS, AND SOLUTIONS

The Gunnison City Water Conservation Coordinator is the City's Water Superintendent, Donald Childs. The Gunnison City Water Conservation Committee is the Water Superintendent and other city staff personnel, the Mayor and members of the City Council. All individuals can be reached by calling the Gunnison City Office at 435-528-7969. As a group the committee members monitor water use throughout the city for violations of water conservation ordinances, water problems in general as reported by the public, and for system leaks.

5.1 Problems Identified

- Gunnison is a small town where culture and traditions are difficult to change. The general public still lacks understanding or chooses not to recognize current landscaping water requirements, efficient water use habits, and practices. Very few water users know how much water is required to maintain healthy landscaped areas and how to consistently use water efficiently outdoors. Most water use practices, whether for indoor use or irrigation are still based on convenience or tradition rather than plant needs and water supply considerations.

- Efficiency of water use practices on City-owned property should be improved further.

- Wastewater from the City flows into evaporation lagoons. Where at the present time cannot be reused.

It should be noted that the problems identified with system leaks and pipeline problems identified in the 2013 WMCP were corrected by the recent water project and very minimal leakage is suspected in the system at this time. Also, problems identified with old inaccurate and faulty water meters in the culinary system were corrected, and all mainline and service meters were replaced with new meters. Service meters are all radio read and can be read at any time

5.2 Conservation Goals and Solutions

In light of the problems identified above, Gunnison City has set a goal to reduce the amount of water used in Gunnison City by 5% per person over the next 10 years. The most effective measure for implementing this WMCP will be public outreach by the Water Conservation Committee. The general public may lack understanding or have long held traditions of landscape water requirements, but understanding and traditions can be overcome. Gunnison City believes that the water use reduction goal can be achieved by following the steps listed below:

1. Continue the public education program efforts that have been established to educate the public, especially the younger generations. To this end, Gunnison City will continue to support state and local water education programs in local schools. It is expected that as time passes young adult citizens that have been continuously exposed to statewide "Slow the Flow" advertising during their youth will continue to become more aware of the need to conserve water, and act accordingly. Water use during recent drought years, has in general been reduced, and efforts toward more efficient use have been observed. This may be a reflection of the ongoing statewide water conservation and education program over the past several years.

2. Gunnison City will occasionally send inexpensive periodic public education flyers. It is believed that if people are exposed to water conservation messages through statewide and local programs, they will subconsciously improve their water conservation habits.

3. Although it cannot control water use at the State Prison, which is under the jurisdiction of the Utah State Department of Corrections, the City will continue to work very closely with Corrections Department and prison staff in an effort to encourage efficient water use.

4. Gunnison City will attempt to reduce the amount of water applied to the cemetery and park to more closely match recommended levels. If landscapes are upgraded the City will make an effort to make them more water efficient, setting an example of conservation for citizens, which in turn should reduce the total amount of water used by the City.

5. Gunnison City significantly increased its water rates and steps last year. This is meant to encourage conservation. It will also allow the City to maintain a financially stable water system with conservation in mind. Gunnison will monitor and track the rates charged to ensure that the City's system is operated responsibly. As rate increases are required, overage tiers that penalize excessive use will be targeted first, rather than simple base rate increases.

6. To prevent total loss of water to evaporation, Gunnison City will occasionally evaluate the feasibility of wastewater treatment options that could allow water reuse, either in the City or elsewhere. The cost of treatment and then the infrastructure to allow reuse is extremely difficult to overcome for small communities. However, water reuse is

becoming more prevalent throughout the country. It is expected that more and better funding may someday be available to help defray the costs.

7. Monitor use patterns to detect leaks. Gunnison City uses triggers in its billing software that automatically alerts staff personnel when current use exceeds previous trends and average use. The City will continue this effort. The effectiveness of this effort has been enhanced by the installation of the new radio read meter system.

8. Gunnison has ordinances that prohibit general waste of water and has set time of day watering restrictions. General waste of water is any practice that allows the water to run in one place over an extended period of time. Landscape irrigation during the hottest part of the day, from 10:00 am to 6:00 pm is not allowed. Violations may result in loss of irrigation water and other penalties. Punishment for violations are established by the Council in line with State guidelines.

9. Gunnison has established emergency water conservation and contingency plans. The water conservation contingency plan for implementation due to severe drought or other emergency system supply shortages is outlined in 6.0 below.

5.3 Education Program Information

The following information on efficient outdoor and indoor water use is available to residents of the Gunnison City area at the city office and will be disseminated periodically as a conservation mailing (See Appendix F).

Efficient Outdoor Water Use:

- Water landscape only as much as required by the type of landscape, and the specific weather patterns of your area, including cutting back on watering times in the spring and fall.

- Do not water on hot, sunny, and/or windy days. You may actually end up doing more harm than good to your landscape, as well as wasting a significant amount of water.

- Sweep sidewalks and driveways instead of using the hose to clean them off.

- Wash your car from a bucket of soapy (biodegradable) water and rinse while parked on or near the grass or landscape so that all the water running off goes to beneficial use instead of running down the gutter to waste.

- Check for the repair leaks in all pipes, hoses, faucets, couplings, valves, etc. Verify there are no leaks by turning everything off and checking your water meter to see if it is still running. Some underground leaks may not be visible due to draining off into storm drains, ditches, or traveling outside your property.

- Use mulch around trees and shrubs, as well as in your garden to retain as much moisture as possible. Areas with drip systems will use much less water, particularly during hot, dry and windy conditions.

- Keep your lawn trimmed and all other landscaped areas free of weeds to reduce overall water needs of your yard.

Efficient Indoor Water Use:

1 About two-thirds of the total water used in a household is used in the bathroom. Concentrate on reducing your bathroom use. Following are suggestions for this specific area:

a. Do not use your toilet as a wastebasket. Put all tissues, wrappers, diapers, cigarette butts, etc. in the trashcan.

b. Check the toilet for leaks. Is the water level too high? Put a few drops of food coloring in the tank. If the bowl water becomes colored without flushing, there is a leak.

c. If you do not have a low volume flush toilet, put a plastic bottle full of sand and water to reduce the amount of water used per flush. However, be careful not to over conserve to the point of having to flush twice to make the toilet work. Also, be sure the containers used do not interfere with the flushing mechanism.

d. Install low flow fixtures your faucets and shower heads. During a 4 minute shower 20 gallons of water can be conserved by simply using a low flow head.

2 When getting a drink, cool water with ice cubes or cool water in the refrigerator in jug with a lid, instead of letting the tap run until cool water comes out.

3 When using a dishwasher or laundry washer, make sure you wash full loads. If the washer adjusts water level, reduce water levels for smaller loads.

Other handout pamphlets directed specifically at outdoor water use and information that could and should be used for periodic mailing to Gunnison City water customers can be found on the Utah Division of Water Resources website. Visit www.water.utah.gov for more information or contact Faye H. Rutishauser, State of Utah Water Conservation Coordinator, Utah Division of Water Resources, 1594 W North Temple #310, Salt Lake City, UT 84114-6201, Phone (801) 538-7268, or email frutishauser@utah.gov .

6.0 CULINARY WATER CONSERVATION CONTINGENCY PLAN

The following water conservation contingency plan is adopted as part of this plan:

Level 1 – Normal Years – In this condition there is currently plenty of culinary and irrigation water available for normal purposes.

- Eliminate watering on City property between the hours of 10 am and 6 pm.
- Encourage voluntary public water conservation measures.
- Mail information on conservation measures, which can be used outside as well as inside.

Level 2 - 75% of Normal Required Supply – In this condition, it is difficult to keep the culinary water tanks full during the daylight hours if people are using culinary water for outdoor purposes.

- Eliminate watering of City property.
- Educate the public about the water supply shortage and request cooperation using local public service radio announcements and local newspapers.
- Consider enactment of stiff emergency rate increases on overage tiers to curtail outdoor watering, without driving commercial customers out of business.
- Enact mandatory public conservation measures.
- Enforce outside watering restrictions, including watering times and quantities.

Level 3 - 50% or Less of Normal Required Supply – In this condition, it is difficult to maintain culinary tank levels during the full 24 hour day.

- Warn the public about water supply shortage and request continued cooperation using local public service radio announcements, local newspapers advertisements, and posted public flyers.
- Enact stiff emergency rate increases on overage tiers to further curtail outdoor watering, without driving commercial customers out of business.
- Strictly enforce all conservation policies with stiff fines for non-compliance.
- Physically restrict water supplies to (in order of priority):
  1. All outside irrigation systems.
  2. Parks and other non-essential support facilities.
  3. Commercial users, restricting the largest, non-animal life support users first.
  4. Residential areas
  5. Commercial animal life support users.
  6. Any other non-life support areas, insuring water supplies to hospitals, hospices, and all other health care facilities, and controlled designated area water facilities.

7.0 IMPLEMENTATION OF WATER CONSERVATION PLAN

This water conservation plan shall be adopted by the Gunnison City Council by ordinance. A water conservation committee should be established with committee membership appointed by the City Council. The water conservation committee shall have responsibility to coordinate the water conservation program goals for the City, coordinate and enhance the education program, and to make regular reports to the Council. All committee members, council members, city staff,

and members of the general public have the duty and responsibility to report general waste of water, and to conserve water wherever possible.

8.0 PERIODIC EVALUATION

This Water Management and Conservation Plan shall be updated and resubmitted to the Division of Water Resources as required to meet changing needs or in 2013 in accordance with the requirements of State Law. The ordaining ordinance is attached as Appendix H.

APPENDIX A

POPULATION AND CONNECTION DATA

APPENDIX A

POPULATION & CONNECTION DATA:

Projected growth rate 2018 to 2068 **1.0%**

	Year	Population	Prison Population	Est. Res. Conn.	Est. County Conn.	Est. Com. Conn.	Est. Total Conn.	1 Prison Conn. ERCs	Est. Total ERC's	Est. Irr. Conns.
Start	2,018	3,473	1,698	628	12	71	712	770	1,630	616
	2019	3,508	1,715	634	12	72	719	778	1,646	622
	2020	3,543	1,732	641	12	72	726	785	1,660	629
	2021	3,578	1,749	647	12	73	733	793	1,676	635
	2022	3,614	1,767	653	12	74	740	801	1,693	641
	2023	3,650	1,785	660	13	75	749	809	1,715	648
	2024	3,687	1,802	667	13	75	756	817	1,730	655
	2025	3,724	1,820	673	13	76	763	826	1,748	661
	2026	3,761	1,839	680	13	77	771	834	1,765	668
	2027	3,798	1,857	687	13	78	779	842	1,783	675
10 Yrs.	2028	3,836	1,876	694	13	78	786	851	1,799	682
	2029	3,875	1,894	701	13	79	794	859	1,816	689
	2030	3,913	1,913	708	14	80	803	868	1,839	696
	2031	3,953	1,932	715	14	81	811	876	1,857	703
	2032	3,992	1,952	722	14	82	819	885	1,875	710
	2033	4,032	1,971	729	14	82	826	894	1,891	717
	2034	4,072	1,991	736	14	83	834	903	1,910	724
	2035	4,113	2,011	744	14	84	843	912	1,929	732
	2036	4,154	2,031	751	14	85	851	921	1,947	739
	2037	4,196	2,051	759	14	86	860	930	1,967	747
20 Yrs.	2038	4,238	2,072	766	15	86	868	940	1,989	754
	2039	4,280	2,093	774	15	87	877	949	2,008	762
	2040	4,323	2,114	782	15	88	886	958	2,028	770
	2041	4,366	2,135	789	15	89	894	968	2,047	777
	2042	4,410	2,156	797	15	90	903	978	2,068	785
	2043	**4,454**	2,178	805	15	91	912	987	2,087	793
	2044	4,498	2,199	813	16	91	921	997	2,110	801
	2045	4,543	2,221	822	16	92	931	1,007	2,131	810
	2046	4,589	2,244	830	16	93	940	1,017	2,152	818
	2047	4,635	2,266	838	16	94	949	1,028	2,173	826
30 Yrs.	2048	4,681	2,289	846	16	95	958	1,038	2,194	834
	2049	4,728	2,312	855	16	96	968	1,048	2,215	843
	2050	4,775	2,335	863	16	97	977	1,059	2,236	851
	2051	4,823	2,358	872	17	98	988	1,069	2,263	860
	2052	4,871	2,382	881	17	99	998	1,080	2,285	869
	2053	4,920	2,405	890	17	100	1,008	1,091	2,308	878
	2054	4,969	2,429	899	17	101	1,018	1,102	2,330	887
	2055	5,019	2,454	908	17	102	1,028	1,113	2,353	896
	2056	5,069	2,478	917	18	103	1,039	1,124	2,380	905
	2057	5,120	2,503	926	18	104	1,049	1,135	2,402	914
40 Yrs.	2058	5,171	2,528	935	18	105	1,059	1,146	2,425	923
	2059	5,223	2,553	944	18	106	1,069	1,158	2,448	932
	2060	5,275	2,579	954	18	107	1,080	1,169	2,472	942
	2061	5,328	2,605	963	18	108	1,090	1,181	2,495	951
	2062	5,381	2,631	973	19	110	1,103	1,193	2,527	961
	2063	5,435	2,657	983	19	111	1,114	1,205	2,551	971
	2064	5,489	2,684	993	19	112	1,125	1,217	2,576	981
	2065	5,544	2,710	1,002	19	113	1,135	1,229	2,599	990
	2066	5,599	2,738	1,012	19	114	1,146	1,241	2,624	1,000
	2067	5,655	2,765	1,023	20	115	1,159	1,254	2,655	1,011
50 Yrs.	2068	5,712	2,793	1,033	20	116	1,170	1,266	2,679	1,021

APPENDIX B

CURRENT AND PROJECTED WATER RIGHT DATA
CURRENT AND PROJECTED WATER SOURCE DATA

APPENDIX B

CURRENT AND PROJECTED WATER RIGHT DATA

A. Existing Water Right

W.R. #			Existing Available Water Right		
			ac-ft	cfs	gpm
63-3376	Municipal	All rights were combined under			
63-2512	Municipal	Change Application a40431			
63-358	Municipal		**1510**	**3.155**	**1212**

B. Current Required Water Right

Indoor Use:

1,630 ERC x (400 gal / ERC day) x (365 day / 1 year) x (1 ft3 / 7.48 gal) x (1 ac-ft / 43560 ft3) = 730 ac-ft

Outdoor Use:

12 ERC x (1 ir. acre / 4 ERC) x (2.37 ac-ft/yr. / ir.-acre/yr) x (day / min) = 7 ac-ft

City Park and Cemetery Irrigation

20 Acre x (4.2 acre feet year* / Irrigated acre) x (1 / 0.7) eff = 120 ac-ft

Total Existing Required Culinary Water Right **737 ac-ft**

Existing Culinary System Water Right Surplus **773 ac-ft**

C. Projected Required Water Right: (20 year growth)

Indoor Use:

1,989 ERC x (400 gal / ERC day) x (365 day / 1 year) x (1 ft3 / 7.48 gal) x (1 ac-ft / 43560 ft3) = 891 ac-ft

Outdoor Use :

12 ERC x (1 ir. acre / 4 ERC) x (2.37 ac-ft/yr. / ir.-acre/yr) x (day / min) = 7 ac-ft

City Park and Cemetery Irrigation

20 Acre x (4.2 acre feet year* / Irrigated acre) x (1 / 0.7) eff = 120 ac-ft

Total Required Culinary Water Right **1,018 ac-ft**

Projected Culinary System Water Right Surplus **492 ac-ft**

D. Projected Required Water Right: (50 year growth)

Indoor Use:

2,679 ERC x (400 gal / ERC day) x (365 day / 1 year) x (1 ft3 / 7.48 gal) x (1 ac-ft / 43560 ft3) = 1,200 ac-ft

Outdoor Use :

12 ERC x (1 ir. acre / 4 ERC) x (2.37 ac-ft/yr. / ir.-acre/yr) x (day / min) = 7 ac-ft

City Park and Cemetery Irrigation

20 Acre x (4.2 acre feet year* / Irrigated acre) x (1 / 0.7) eff = 120 ac-ft

Total Required Culinary Water Right **1,327 ac-ft**

Projected Culinary System Water Right Surplus **183 ac-ft**

Note: 1/4 Acre = Assumed average irrigated acre per lot

* From Appendix C

APPENDIX B

CURRENT AND PROJECTED WATER SOURCE DATA

A. Water Source Capacity:

150 gpm	Minimum Peacock Spring flow available	
200 gpm	Christensen Well	
295 gpm	Sorensen Well	
850 gpm	Bartholomew Well as currently equipped	**Total:** = **1495 gpm**

B. Existing Required Source Capacity

Indoor Use:

1,630 ERC x (800 gpd / ERC) x (1 day / 24 hr) x (1 hr / 60 min.) = 906 gpm

Outdoor Use:

12 ERC x (1 acre / 4 ERC) x (3.39 gpm* / irr. acre) x (1 / 0.7 eff.) = 15 gpm

City Park and Cemetery Irrigation

20 acre x (5.65 gpm** / irr. acre) = 113 gpm

Total Source Capacity Required	**1,034 gpm**
Existing Source Capacity Surplus	**461 gpm**

C. Projected Required Source Capacity (20 year growth)

Indoor Use:

1,989 ERC x (800 gpd / ERC) x (1 day / 24 hr) x (1 hr / 60 min.) = 1,105 gpm

Outdoor Use:

12 ERC x (1 acre / 4 ERC) x (3.39 gpm* / irr. acre) x (1 / 0.7 eff.) = 15 gpm

City Park and Cemetery Irrigation

20 acre x (5.65 gpm** / irr. acre) = 113 gpm

Total Source Capacity Required	**1,233 gpm**
Future Source Capacity Surplus	**262 gpm**

D. Projected Required Source Capacity (50 year growth)

Indoor Use:

2679 ERC x (800 gpd / ERC) x (1 day / 24 hr) x (1 hr / 60 min.) = 1,488 gpm

Outdoor Use:

12 ERC x (1 acre / 4 ERC) x (3.39 gpm* / irr. acre) x (1 / 0.7 eff.) = 15 gpm

City Park and Cemetery Irrigation

20 acre x (5.65 gpm** / irr. acre) = 113 gpm

Total Source Capacity Required	**1,616 gpm**
Future Source Capacity Surplus	**(121) gpm**

Note: 1/4 Acre = Assumed average irrigated acre per lot at 70% irrigation efficiency.

* From Utah Rules for Public Drinking Water Systems

** From Appendix C

APPENDIX C

GUNNISON CITY PARK AND CEMETERY IRRIGATION DATA

APPENDIX C

GUNNISON CITY PARK AND CEMETERY IRRIGATION

CEMETERY STATIONS

PROGRAM A	Station	Min.	Hours						
	1	60		30	PU	@	3.5	105	gpm
	2	105		10	FAL	@	18	180	gpm
	3	80		9	FAL	@	18	162	gpm
	4	35		88	PU	@	3.5	308	gpm
	5	80		8	FAL	@	18	144	gpm
	6	80		10	FAL	@	18	180	gpm
	7	80		4	FAL	@	18	72	gpm
	8	80		6	FAL	@	18	108	gpm
	9	80		10	FAL	@	18	180	gpm
	11	90		10	FAL	@	18	180	gpm
	15	35		23	PU	@	3.5	81	gpm
	24	30		60	PU	@	3.5	210	gpm
	25	20		54	PU	@	3.5	189	gpm
		855	14.25	Hour		Average =		161	gpm
						Total Gallons =		138,050	gal
MANUAL	1	120		65	MP	@	5	325	gpm
(Cemetery Road)		120	2	Hour		Average =		325	gpm
						Total Gallons =		39,000	gal

PROGRAM B	Station	Min.	Hours						
	10	85		4	FAL	@	18	72	gpm
	12	105		5	FAL	@	18	90	gpm
	13	80		8	FAL	@	18	144	gpm
	14	80		8	FAL	@	18	144	gpm
	16	60		9	FAL	@	18	162	gpm
	17	30		46	PU	@	3.5	161	gpm
	18	80		8	FAL	@	18	144	gpm
	19	90		8	FAL	@	18	144	gpm
	21	60		10	MP	@	5	50	gpm
	22	45		10	FAL	@	18	180	gpm
	23	45		8	FAL	@	18	144	gpm
	24	20		60	PU	@	3.5	210	gpm
	25	20		54	PU	@	3.5	189	gpm
	26	60		10	FAL	@	18	180	gpm
	27	60		10	FAL	@	18	180	gpm
	28	80		10	FAL	@	18	180	gpm
	29	30		130	BUB	@	0.2	26	gpm
	30	30		54	PU	@	3.5	189	gpm
		1060	17.67	Hour		Average =		144	gpm
						Total Gallons =		152,463	gal

PARK STATIONS

PROGRAM A All Stations

Station	Min.	Hours						
1	80		5	FAL	@	18	90	gpm
			15	MP	@	5	75	gpm
			5	PU	@	3.5	18	gpm
							183	gpm
2	80		5	FAL	@	18	90	gpm
			17	MP	@	5	85	gpm
			2	PU	@	3.5	7	gpm
							182	gpm
3	80		5	FAL	@	18	90	gpm
			15	MP	@	5	75	gpm
							165	gpm
4	80		10	FAL	@	18	180	gpm
			15	MP	@	5	75	gpm
			14	PU	@	3.5	49	gpm
							304	gpm

Station	Min.	Hours						
5	45		25	PU	@	3.5	88	gpm
6	45		7	PU	@	3.5	25	gpm
7	80		8	MP	@	5	40	gpm
			12	PU	@	3.5	42	gpm
							82	gpm
8	30		7	PU	@	3.5	25	gpm
9	45		24	PU	@	3.5	84	gpm
10	45		22	PU	@	3.5	77	gpm
11	60		7	MP	@	5	35	gpm
	440	7.333	Hour		Average =		114	gpm
					Total Gallons =		50,000	gal

Total Estimated Water Used Per Day for Cemetery and Park Irrigation

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Cemetery Schedule	Program A	x		x		x		
	Program B		x		x		x	
	Manual		x		x		x	
Park Schedule	Program A	x		x		x		
	Total Gallons:	188,050	191,463	188,050	191,463	188,050	191,463	

Weekly Total Gallons Used:	**1,138,539**	**gal**	
Estimated Total Acres:	**20**	**acre**	
Daily Total Gallons per Acre:	**8,132.00**	**gal/acre**	
Daily Average gpm:	**113**	**gpm**	
Daily Average gpm per Acre:	**5.65**	**gpm**	
24 Week Irrigation Season Total Gal:	**27,324,936**	**gal**	
Season Acre Feet:	**84**	**acre-feet**	
Season Acre Feet per Acre:	**4.20**	**acre-feet/acre**	

Sprinkler Legend:	**FAL**	**Rainbird Falcon 6504 w/nozzle 18 or equal**
	MP	**Rainbird Maxi-paw w/nozzle 10LA or equal**
	PU	**Rainbird 1800 Series Spray Heads or equal**

APPENDIX D

2018 CULINARY WATER USAGE & ESTIMATED SECONDARY

APPENDIX D

CULINARY WATER USAGE (& ESTIMATED SECONDARY)

All Customers

Month	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Culinary	Estimated Secondary	Estimated Total
Ac.-Ft.	36.68	34.72	41.82	37.17	37.00	41.22	45.13	56.82	59.80	71.97	63.18	43.54	569	370	939
Gallons	11,952,000	11,313,000	13,625,000	12,112,000	12,056,000	13,430,000	14,705,000	18,515,000	19,485,000	23,451,000	20,587,000	14,187,000	185,418,000	120,426,324	305,844,324

Commercial, Industrial, Institutional, Farm Customers (Average Only)

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct			
Ac.-Ft.	22.75	22.71	28.27	25.08	25.07	26.09	29.92	40.00	39.94	49.70	42.41	30.41	382	-	382.34
Gallons	7411000	7398000	9212000	8172000	8167000	8501000	9749000	13034000	13012000	16195000	13817000	9910000	124,578,000		124,578,000

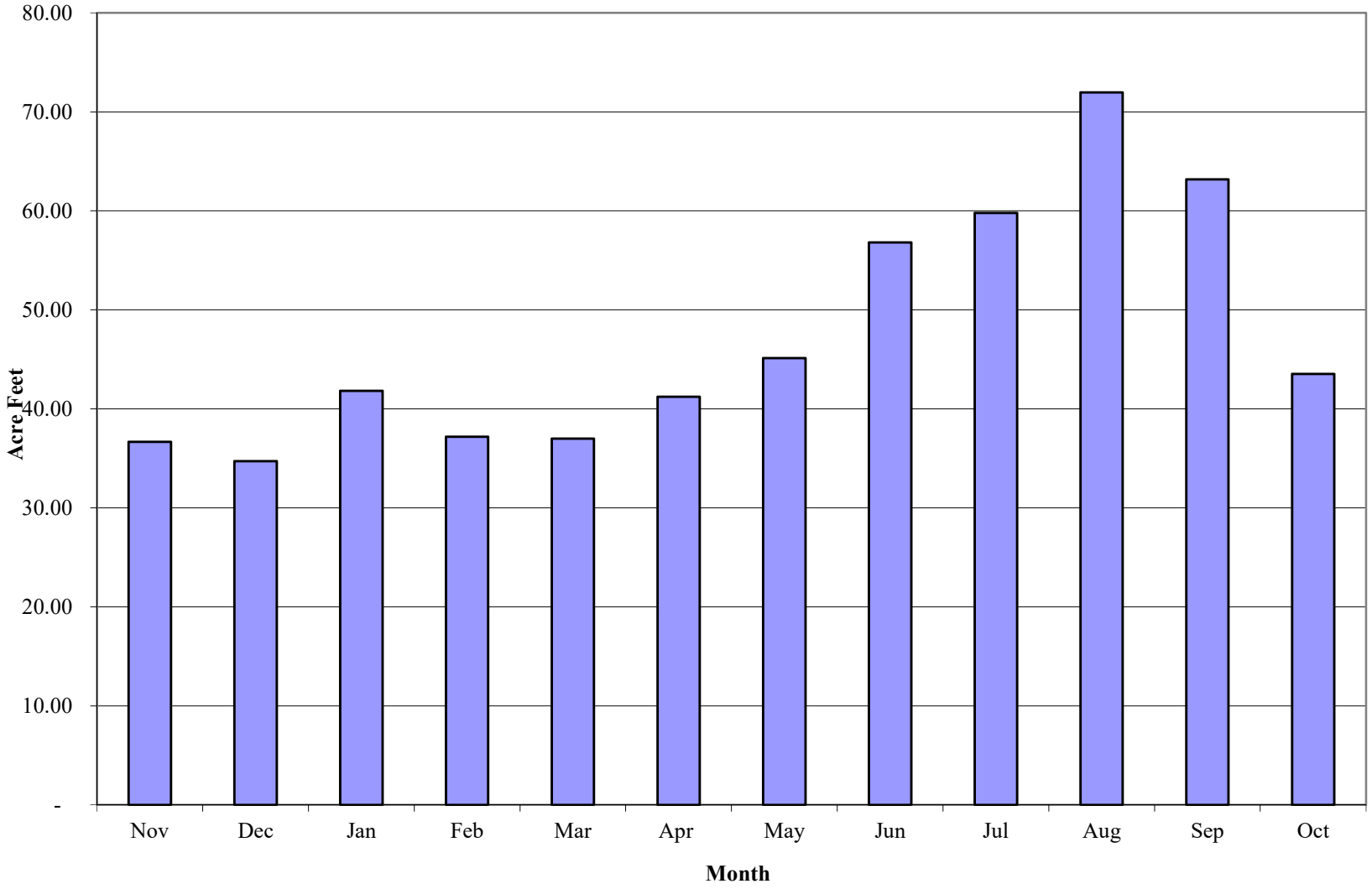
Residential Customers

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct			
Ac.-Ft.	13.94	12.02	13.54	12.09	11.94	15.13	15.21	16.82	19.87	22.27	20.78	13.13	187	369.60	556.32
Gallons	4,541,000	3,915,000	4,413,000	3,940,000	3,889,000	4,929,000	4,956,000	5,481,000	6,473,000	7,256,000	6,770,000	4,277,000	60,840,000	120,426,324	181,266,324

	Current WMCP - 2018		Previous WMCP - 2013	
Estimated Population =	**3,473**		**3,385**	
Culinary Average =	**146**	**GPCD**	**139**	**GPCD**
***Indoor Residential Culinary Average =**	**39.73**	**GPCD**	**39.09**	**GPCD**
Secondary Average =	**95**	**GPCD**	**95**	**GPCD**
Overall Average =	**241**	**GPCD**	**234**	**GPCD**

*Based on average monthly residential use from November to March

Appendix D
Gunnison City 2018 Culinary Water Usage



APPENDIX E

ESTIMATED CURRENT AND PROJECTED SECONDARY IRRIGATION USE

APPENDIX E

ESTIMATED CURRENT AND PROJECTED SECONDARY IRRIGATION USE

A. Irrigation Available

As of 2018 city staff reported that there are 982 shares of irrigation water available for Gunnison City at this time. Each share represents an approximate average of .9 ac-ft delivered. The City currently requires developers to provide 2 shares of irrigation water for use in the City for each new acre to be developed before the lot is approved.

982 share x $\frac{0.9 \text{ ac-ft}}{\text{share}}$ = 883.8 ac-ft

B. Current Irrigation Used

Estimated Irrigation Water Used:

* 616 conn. x $\frac{0.6 \text{ ac-ft}}{\text{conn.}}$ = 369.60 ac-ft

C. Projected Secondary Customer Use: (20 year growth)

Estimated Irrigation Water Used:

* 754 conn. x $\frac{0.6 \text{ ac-ft}}{\text{conn.}}$ = 452.40 ac-ft

D. Projected Secondary Customer Use: (50 year growth)

Estimated Irrigation Water Used:

* 1,021 conn. x $\frac{0.6 \text{ ac-ft}}{\text{conn.}}$ = 612.60 ac-ft

* Excludes Vacant Lots

E. Remainaing Irrigation Water Available = 271.2 **ac-ft

** Assumes no additional shares provided by developers.

APPENDIX F

GUNNISON CITY WATER CONSERVATION MESSAGE

GUNNISON CITY WATER CONSERVATION MESSAGE

EFFICIENT OUTDOOR WATER USE:

- Water landscape only as much as required by the type of landscape, and the specific weather patterns of our area, including cutting back on watering times in the spring and fall.

- Do not water on hot, sunny, and/or windy days. You may actually end up doing more harm than good to your landscape, as well as wasting a significant amount of water.

- Sweep sidewalks and driveways instead of using the hose to clean them off.

- Wash your car from a bucket of soapy (biodegradable) water and rinse while parked on or near the grass or landscape so that all the water running off goes to beneficial use instead of running to waste.

- Check for the repair leaks in all pipes, hoses, faucets, couplings, valves, etc. Verify there are no leaks by turning everything off and checking your water meter to see if it is still running. Some underground leaks may not be visible on the surface.

- Use mulch around trees and shrubs, as well as in your garden to retain as much moisture as possible. Where practical, areas with drip systems will use much less water, particularly during hot, dry and windy conditions.

- Keep your lawn well trimmed and all other landscaped areas free of weeds to reduce overall water needs of your yard.

EFFICIENT INDOOR WATER USE:

1 About two-thirds of the total water used in a household is used in the bathroom. Concentrate on reducing your bathroom use. Following are suggestions for this specific area:

   a. Do not use your toilet as a wastebasket. Put all tissues, wrappers, diapers, cigarette butts, etc. in the trashcan.

   b. Check the toilet for leaks. Is the water level too high? Put a few drops of food coloring in the tank. If the bowl water becomes colored without flushing, there is a leak.

   c. If you do not have a low volume flush toilet, put a plastic bottle full of sand and water to reduce the amount of water used per flush. However, be careful not to over conserve to the point of having to flush twice to make the toilet work. Also, be sure the containers used do not interfere with the flushing mechanism.

   d. Install low flow fixtures your faucets and shower heads. During a 4 minute shower 20 gallons of water can be conserved by simply using a low flow head.

2 When getting a drink, cool water with ice cubes or cool water in the refrigerator in jug with a lid, instead of letting the tap run until cool water comes out.

3 When using a dishwasher or laundry washer, make sure you wash full loads. If the washer adjusts water level, reduce water levels for smaller loads.

4 Catch and reuse wasted “gray” water for beneficial use on lawns and plants outside. When washing hands or rinsing vegetables, catch water in a basin then reuse on lawns or plants outside.

5 When getting a drink, cool water with ice cubes or cool water in the refrigerator in jug with a lid, instead of letting the tap run until cool water comes out.

6 When using a dishwasher or laundry washer, make sure you wash full loads. If the washer adjusts water level, reduce water levels for smaller loads.

APPENDIX G

CULINARY WATER RATE SCHEDULE

APPENDIX G

RESOLUTION NO. 2017-1
GUNNISON CITY

A RESOLUTION SETTING NEW CULINARY WATER RATES AMENDING RESOLUTION 2000-2 SECTION 2-1-6 AND 2-1-7, 2000-09, 2000-10 SECTION 2-1-6, 2002-2, SECTION 2-1, RESOLUTION 2003-2, SECTION 2-1, RESOLUTION 2010-4, RESOLUTION 2012-3 SECTION 2-1 AND RESOLUTION 2014-8 CULINARY WATER SERVICE

WHEREAS: Gunnison City owns and operates a culinary water system, and

WHEREAS: Costs associated with managing and operating the culinary water system continue to increase, and

WHEREAS: The Gunnison City Culinary Water Distribution System is in need of being upgraded, and these upgrades and improvements have, in fact, caused the City to secure funding assistance in the form of grants and loans from State and Federal Funding Agencies, and

WHEREAS: The increased water rates being implemented with this Resolution are needed to meet the obligations of the city recently made in qualifying and obtaining funding for the Gunnison City Culinary Water System upgrade.

WHEREAS: The Mayor and City Council desire to make the water rate adjustments as equitable for the citizens as possible, and

WHEREAS: Gunnison City has adopted as Ordinance governing its operation which provides, among other things, the right to change or fix water rates by resolution,

NOW THEREFORE IT IS HEREBY RESOLVED BY THE MAYOR AND CITY COUNCIL OF GUNNISON CITY, SANPETE COUNTY, UTAH, AS FOLLOWS:

SECTION 1: WATER RATES. All water rates or user fees historically charged, for water services, are hereby ratified and confirmed.

As of May 1, 2017, the culinary water user rates shall be as follows:

INSIDE CITY LIMITS:

Base Rate: $33.00 for 0 – 4,000 gallons

Overage Rates: $1.40 per 1000 gallons for 4,001 – 50,000 gallons
$2.00 per 1000 gallons for 50,001 – 300,000 gallons
$2.40 per 1000 gallons for 300,001 – 500,000 gallons
$3.00 per 1000 gallons for 500,001 - 1,000,000 gallons
$4.00 per 1000 gallons for 1,000,001 -2,000,000 gallons
$5.50 per 1000 gallons for 2,000,000 and over

OUTSIDE CITY LIMITS:

Base Rate: $42.00 for 0 – 4,000 gallons

Overage Rates: $1.90 per 1000 gallons for 4,001 – 50,000 gallons
$2.50 per 1000 gallons for 50,001 – 300,000 gallons
$2.60 per 1000 gallons for 300,001 – 500,000 gallons
$3.00 per 1000 gallons for 500,001 - 1,000,000 gallons
$4.00 per 1000 gallons for 1,000,001 - 2,000,000 gallons
$5.50 per 1000 gallons for 2,000,000 and over

SECTION 2: EFECTIVE DATE AND POSTING OF RESOLUTION. This Resolution shall take effect immediately and following the posting thereof in the following three (3) public and conspicuous places in the City:

1- Gunnison City Hall, 38 West Center Street, Gunnison, Utah
2- U.S. Post Office, 95 West 100 South, Gunnison, Utah
3- Gunnison Valley Bank, 10 South Main Street, Gunnison, Utah

PASSED, ADOPTED, AND ORDERED POSTED by the Mayor and City Council of Gunnison City, Sanpete County, Utah, on this 22nd day of March, 2017.

APPROVED:

Bruce A Blackham

Bruce Blackham, Mayor

ATTEST:

Janell Braithwaite

Janell Braithwaite, City Recorder

CITY OF GUNNISON CORPORATE SEAL STATE OF UTAH

APPENDIX H

WATER MANAGEMENT AND CONSERVATION PLAN ORDAINING ORDINACE

WATER CONSERVATION PLAN ORDINANCE

GUNNISON CITY

A Municipal Corporation

ORDINANCE NUMBER **2019-2**

AN ORDINANCE AMENDING PROVISION OF THE GUNNISON CITY MUNICIPAL CODE PERTAINING TO THE ADOPTION OF A WATER CONSERVATION PLAN

Section 1 Preamble

A. WHEREAS, Gunnison City operates a culinary water system; and

B. WHEREAS, the City Council understands the need to use water in a more efficient manner to allow for future sustained growth of the community.

Section 2 Ordaining Clause

NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF GUNNISON CITY, UTAH:

Title IX Chapter 9-7 of the Gunnison City Municipal Code is hereby to read as follows:

Section 3 Water Conservation Plan

WATER CONSERVATION PLAN, 9-7-1 The Water Management and Conservation plan of Gunnison City, is hereby adopted effective this **2nd** day of **January, 2019,** The plan will be amended not less than every five years, or as required by the State of Utah, and will continue to play a vital role in the future development of Gunnison City, Utah.

SIGNED:

Lori Nay, Mayor		Michelle Smith, Council Member
Blake Donaldson, Council Member		Blaine Jensen, Council Member
Robert Anderson, Council Member		Andy Hill, Council Member *Absent*

Attest: Janell Braithwaite
Janell Braithwaite, City Recorder

CITY OF GUNNISON CORPORATE SEAL STATE OF UTAH

Gunnison City Council Public Hearing and Meeting Minutes
Wednesday, January 2, 2019, 7:00 PM
Gunnison City Hall, 38 West Center
Gunnison, UT 84634

Present: Mayor Lori Nay, Councilmembers: Robert Andersen, Blake Donaldson, Blane Jensen and Michelle Smith, City Recorder Janell Braithwaite, City Treasurer JoAnn Taylor, BYU Urban Planning Group: Dr. Michael Clay and Jeff Coons, Rick Roberts and Gabe Miller with Kimball & Roberts, CPA, Gary Keddington and Phil Warnock with Keddington and Christensen, LLC, and Jeff Kaplan

Presiding: Mayor Lori Nay
Invocation: Mayor Lori Nay

7:00 p.m. Public Hearing to Receive Public Comments Regarding the Sponsoring of a Grant Request for the Recreation Dept. Involving a Proposed Community Development Block Grant Application

Councilmember Andersen made the motion to open the public hearing to receive public comment regarding Gunnison City's sponsorship of a grant request for the Recreation Department involving a Community Development Block Grant application. Councilmember Jensen seconded the motion. The motion passes with a 3-0 vote. Those voting aye were Councilmembers Andersen, Donaldson and Jensen. Councilmember Smith had stepped out of the room.

7:05 p.m. Public Hearing Open.

Public Comment

Dr. Clay thanked Mayor Nay for inviting them to the meeting today. He stated they had the printed copies of the General Plan as well as a jump drive containing the files for the plan and some maps to hand over to the city. Dr. Clay reported the jump drive had the plan broken down into two files, but the City was more than welcome to break it down into more sections if needed. It was recommended the plan be placed on the city's website for the public to view. Jeff noted they could make any changes that needed to be made, but would prefer working through the Mayor for those. Any changes would have to come as an amendment, and would need to go through the Council for approval. Dr. Clay noted the physical copy was for developers who wanted to look at the plans, explaining that most people want to look at a paper copy as well. He expressed his appreciation for the Council and citizens' help in putting this together. Mayor Nay thanked Dr. Clay for the hard work put in by his team that was involved with this.

Discuss and proposed Approval of Ordinance 2019-1, City Council Meeting Schedule for 2019

The Mayor and Councilmembers reviewed the meeting schedule consisting mostly of the 1st and 3rd Wednesdays of the months. The different conflicts throughout the year were noted, and it was determined to change the January 16th meeting to January 30th.

Councilmember Jensen made the motion to approve Ordinance 2019-1 with the discussed change of the Wednesday, January 16th meeting to Wednesday, January 30th. Councilmember Donaldson seconded the motion. The motion passes with a 4-0 vote.

Public Comment

Jeff Kaplan stated he was 63 years old and had moved from California about seven or eight weeks ago. He hadn't lived in Gunnison very long, but he wanted to voice his concerns and complaints about his water bill. He explained he was being charged $33 per month for 4,000 gallons of water, and he felt he was subsidizing everyone else in the city. He wanted to know why he and all of the other people that don't use that much water subsidize the higher users. Mr. Kaplan remarked every other municipality starts out with tiers that charge just the opposite of what Gunnison does, and he didn't think it was right for Gunnison to charge the way they do. He thought he would go door to door explaining what was happening and have everyone sign a petition then maybe the Council would listen. He would have all of the calculations ready to present at the next meeting. Mayor Nay explained the fee schedule had not been a flippant decision, but had been based on many studies and engineering calculations with public hearings held during that time to get the publics' opinion. Councilmember Jensen explained he understood the Water Board expected the base rate to cover the costs of operating the water system. Mr. Kaplan stated he did not want to hear any of the explanations noting he has already heard them.

7:30 p.m. Jeff Kaplan left.

Water Conservation Plan with Proposed Approval of Ordinance 2019-2, Water Conservation Plan, Adding Chapter 9-7 to Title IX of Gunnison City Code, Utilities ~ Councilmember Andersen

Councilmember Andersen explained Sunrise Engineering had completed the 2018 Water Conservation Plan for the city noting this has to be completed every five years to stay in compliance with state regulations. The Council reviewed the presented plan.

Councilmember Andersen made the motion to approve the 2018 Water Conservation Plan as Ordinance 2019-2, Water Conservation Plan, and will be added to the City Code. Councilmember Smith seconded the motion. The motion passes with a 4-0 vote.

Proposed Approval of Resolution 2019-1, Amending Gunnison Administrative Policies and Procedures Manual, Retirement Plan, Exemption for Elected and Appointed Officials

Recorder Braithwaite announced she had just completed a Utah Retirement audit, and was now trying to take care of the recommendations and findings from the audit. This was one item that needed to be clarified in the Policies and Procedures manual in making sure it was very clear that elected and appointed officials were eligible to exempt from the URS retirement plan.

Councilmember Andersen made the motion to approve Resolution 2019-1, amending the Gunnison Administrative Policies and Procedures manual. Councilmember Jensen seconded the motion. The motion passes with a 4-0 vote.

Proposed Approval of IT Expenditure for City Hall ~ Councilmember Jensen

Councilmember Jensen presented three different quotes for a new server for City Hall. He explained the differences between the three and gave his recommendation when asked by Mayor Nay to do so. Councilmember Jensen recommended the server on quote #3000032282510.1 for $7,030.98 noting this had been budgeted for in the Recorder's Capital Outlay budget. Mayor Nay suggested the Council follow his recommendation and go with the server and quote discussed.

Councilmember Jensen made the motion to approve quote #3000032282510.1 from Dell for $7,030.98 to come out of the Recorder's Capital Outlay budget. Councilmember Donaldson seconded the motion. The motion passes with a 4-0 vote.

Councilmember Jensen will get Recorder Braithwaite an updated quote to place the order.

Discuss CIB Master List - Short Term and Long Term Projects ~ Mayor Nay

Mayor Nay reported Travis Kyhl with Six County would be here on the February 19th to review the master list. Mayor Nay wanted the Council to think about what their priorities were. She commented she felt it was a good time to go for projects. Councilmember Smith questioned if they had any idea of what it would cost to expand the secondary water pond. Councilmember Donaldson explained the city's property was about used up, and they would need to purchase more land if they wanted to expand. Councilmember Jensen felt any surrounding property that would need to be purchased was owned by the state, and consisted mainly of rock and would present elevation challenges. Mayor Nay stated they would have to get some engineering done. Mayor Nay referred to the surveys that had been done pointing out it seemed people wanted additional roads, and that was something they needed to look at; improve the existing roads and/or new roads. Councilmember Donaldson questioned how much B&C money the city received per foot. Councilmember Jensen explained how the B&C road money was paid out for asphalt, gravel and unimproved roads. Mayor Nay noted the road called Indian Road would cost anywhere from $70,000-$80,000 for doing the whole length with a double chip seal. Councilmember Jensen questioned what the benefits and/or losses would be if the city built another storage pond. This was compared to the benefits of completing road work within the city. The different roads were discussed as well as the benefits of improving them. He felt all of the roads were paved within the city except for two. He stated he was in favor of paving the road. He would like some of his questions answered on the irrigation before moving further on that subject. Councilmember Donaldson pulled up Google Earth to view the east side of the city's property behind Satterwhite's noting it was 5,307 feet in elevation. The delivery system was discussed further as well as the cost of the proposed properties. Mayor Nay questioned if the city would be able to collect all that Peacock Springs produced throughout the winter. Councilmember Jensen brought up the rate of collecting it wondering if it the city could justify the cost of doing this noting the evaporation that occurs by storing it over the winter months. He pointed out the evaporation he sees in his pond at home noting it is much greater in the winter than the summer months. He also questioned if the city could actually build a pond large enough to store that amount of water and could they legally store it. Councilmember Donaldson pointed out the work that had been taking place on the river by Chester to get those water rights taken care of noting a drone had been brought in to fly the area, and they were up there cleaning it out now. They also had to get the state engineer involved and are getting it taking care of.

Mayor Nay questioned if the city owned enough water shares for future growth. Councilmember Andersen exclaimed they didn't want to turn anyone down that wanted to develop. He reported the irrigation water shares were going anywhere from $2,500-$3,000 per share. Councilmember Jensen acknowledged water was one of the best investments you could have.

Councilmember Andersen related an interesting experience he had had this morning while working at the temple. All of the people living in the trailer court had heir water pipes freeze up. He and Supt. Childs would like to have something posted around the city reminding people to keep a small drip coming from their faucets to prevent freezing during this cold spell.

8:00 p.m. Gary Keddington and Phil Warnock arrived.

Discuss Opportunity for Local Event, Spike 150 ~ Mayor Nay

Mayor Nay explained that through a series of activities and events, the Spike 150 initiative aimed to inspire, educate and reflect on the 150th anniversary of the Transcontinental Railroad. She would like to see the city join in on this celebration, and gave some suggestions for different activities to host during the May 10th celebration. Councilmember Smith agreed with the suggestions and would like the city to be on board with this. She suggested the city host a Friday-Saturday event as well as the movies Mayor Nay had suggested at the Casino Star Theatre. Mayor Nay will continue to work on this.

8:10 p.m. Rick Roberts and Gabe Miller arrived.

2018 Audit Report, Gary Keddington, Keddington & Christensen, LLC and Kimball & Roberts, CPA

Gary reported he would review the financial statements as well as some other financial items. He pointed out the city's fiscal year ended June 30th. Gary gave a management analysis talking about what had gone on throughout the year. The cash flow was reviewed next, and he reminded the Council of the money that continually had to be put into reserve funds because of the bonds the city had. The irrigation fund was brought up and he wanted the Council to pay special attention to the discussion on the city's debt. The debt was reviewed as well as the debt schedule. Mayor Nay spoke up regarding the debt noting that generally speaking municipalities spend money for improvements with Gary pointing out the city had quite a bit of debt for a small community. Mayor Nay questioned if the city had room for debt or not. At that point Gary reminded the Council of the sewer issues they are in the middle of noting they still weren't sure about a cost on that project yet. Mayor Nay questioned if it was time to look at the property taxes again wondering if the city was keeping up on the property taxes. Gary mentioned the process that would take place in order to go through a truth in taxation and Recorder Braithwaite mentioned the last time the city looked at that and found out they were the second highest in the county they decided to wait for a future year.

Rick Roberts with Kimball & Roberts, CPA reviewed the independent auditors report. He listed those items they had gone through and tested in making sure the balance sheets and cash balances figured correctly. He then read their opinion noting they look at how the cash was managed as well as the receivables. They did have a couple of state compliance findings noting part of the testing was required by the state. They do testing on the state laws and mandates and go through all of those processes.

Gabe stated they appreciated the opportunity of doing the audit and commended Gary for doing such a great job. Gary made it possible for the auditors to just come in and do their work. Gabe referred to the compliance report. Gabe reviewed the process they go through with the inquiries, observation and documentation testing. He wanted them to become familiar with the terms used and referred them to page 60 of the audit report. He explained they were looking for deficiencies and material weaknesses, and there were no deficiencies noted during the audit. He referred to the State Compliance report noting the state issued a compliance guide every year, and they are told what they would like tested. The items audited were reviewed. They had identified two findings in regards to the city's General Fund balance. The first being too much money in the fund noting this was not a bad problem to have, and it was only a very small percentage that it was over. He explained this actually came from the grant the city had received from the state, but the budgeted money had not all been spent which put the fund over in the amount allowed . The second was the interfund transfer; water and sewer money transferred to the General Fund and there had not been a separate public hearing held. Recorder Braithwaite noted the public had been noticed with letters going out to each home, but the special public hearing was an oversight, and had not been held.

Councilmember Andersen made the motion to accept the audit as presented. Councilmember Jensen seconded the motion. The motion passes with a 4-0 vote.

Councilmember Jensen referred back to the water rates the city charges. Gary reminded the Council the state had said the city had to raise the base rate noting their whole intent was to base the fees in order for the city to be able to make the bond payment. The Council discussed if the rates could have been set up differently. Gary stated the base rates really depended on the debt rates. The

state law required the city to have a step or tier program in place. It can't be the same across the board. Councilmember Donaldson reminded the Council of all the work that had gone into setting the water rates; Rural Water had come in along with the engineers to determine where the city needed to be to apply for the grants and funding because the current rates wouldn't even allow the city to apply for grants. The rates were then determined following the funding to make sure the city could meet the debt schedule. A lengthy discussion regarding the rates ensued.

Discuss and Proposed Approval of Capital Outlay Expenditure for City Hall, Heritage Hall Additional Tables ~ Mayor Nay

Mayor Nay noted the city hall had been stocked with the round tables after the building was built, but the plan was to purchase more of the banquet tables the next year so those who rented the Heritage Hall would have their choice of tables to use, but this had never been pursued. Mayor Nay would like to see more banquet tables purchased. Recorder Braithwaite reported the Seniors currently have four tables owned by the city that they keep in their closet. Recorder Braithwaite will obtain some prices to present at the next meeting. Councilmember Jensen reviewed the prices of some tables recently purchased at his place of work noting they were about $175 for an 8' table from UI.

Proposed Approval of City Council Meeting Minutes for Wednesday, December 5, 2018, Wednesday, November 28, 2018, Wednesday, November 7, 2018 and Wednesday, October 17, 2018.

Councilmember Smith made the motion to approve the city council meeting minutes for Wednesday, December 5, 2018, Wednesday, November 28, 2018, Wednesday, November 7, 2018 and Wednesday, October 17, 2018. Councilmember Jensen seconded the motion. The motion passes with a 4-0 vote.

Proposed Approval of Bills and Adjustments

Councilmember Jensen made the motion to approve the bills and adjustments as presented. Councilmember Smith seconded the motion. The motion passes with a 4-0 vote.

The Council received a current financial statement electronically.

Councilmember stated the Recreation (Rec) Committee wanted to resurface all of the ball diamonds noting they really need a lot of work. He reported John Christensen is on the Rec Committee as well as the committee for the CDBG grants and felt there was an opportunity for obtaining a grant. Councilmember Andersen stated the Rec Committee was looking at getting $250,000 and that Gunnison City would be in the best position to sponsor the grant application for the valley. Councilmember Andersen stated this was a great opportunity to look at some grants. Councilmember Smith brought up the money that had been set aside to help with the park. Mayor Nay stated this would have to be a coordinated effort with a commitment from the School District to work on the discussed park together. Councilmember Jensen stated the city had already spent an inordinate amount of money out there, and they had just let it go. Councilmember Smith questioned what the Rec Committee did out there with Mayor Nay responding that they basically handle the programs. Councilmember Smith would like to see a financial statement of what the Rec Committee expends. Mayor Nay noted they hadn't taken good care of it at all, and the fields hadn't had any investment in the infields for several years. Mayor Nay stated the school owns the fields, but there is a shared usage with the city having access to them from May through September. Councilmember Andersen agreed that the school hadn't taken good care of the fields. He did mention that originally the fields were set up that the city would waive the fees for the school for watering the fields. The water shortage was discussed. The Council didn't want to see all of the improvements made to the fields only to have them dry up again. Councilmember Jensen would like to see the city help during a dry years. The delivery system for the irrigation water was discussed. Councilmember Andersen brought up the Richfield fields and how the ag (agriculture) class had taken over the fields and gotten all of the fertilizer donated from IFA and the facility had improved 100% more than it had been in the past 10 years. Councilmember Smith didn't want to put all of this money into the fields then have them go bad again. Mayor Nay would like to go for the CDBG money based on having an agreement with the School District and the school itself that if we were to put in money like this that they would be required to maintain it. Councilmember Andersen stated there was supposed to be a committee to help with these fields to make sure all of this gets taken care of, but it has been long since dropped. Councilmember Smith would like to see the city get the park done and look at the whole layout and do it right. Councilmember Jensen suggested the city take the money that had been set aside to help with a park at the ball fields and get it done all at once. The Council agreed with this.

Mayor Nay would like to have a discussion about the recreation budget. Councilmember Andersen noted he had given Tyson Brackett the charge of meeting with every Council and explain the budget. Mayor Nay would like Gary Keddington to be in attendance at the time the recreation budget is reviewed.

Mayor Nay reported she would get a grant proposal put together and get the School District involved while looking at the holistic approach.

Councilmember Andersen made the motion to close the public hearing to receive public comment regarding the sponsoring of a grant request for the Recreation Dept. involving a proposed Community Development Block Grant application. Councilmember Jensen seconded the motion. The motion passes with a 4-0 vote.

9:12 p.m. Public Hearing Closed.

Future Items:

Wastewater: Mayor Nay announced Garrick with Jones & DeMille Engineering would be to the next meeting to give an update on the sewer project. She noted the city had the money in the sewer account and the whole project would be about $250,000 with Centerfield's amount being about 33%. This will be discussed further at the next meeting.

Employees: Recorder Braithwaite reported a family had donated two cemetery plots to the city's employee, Luis (Pancho) Cejudo, to help with the cost of his wife's burial and questioned the Council if the city would waive the opening and closing costs. The Council unanimously agreed to waive the opening and closing fees for Pancho.

Internet Service: Recorder Braithwaite had a letter from the Gunnison Telephone Company that offered an improved security internet service for a small fee. Councilmember Jensen suggested Recorder Braithwaite talk with Librarian Childs to see if this was something she would be interested in for the library or if she was satisfied with the current firewall that is in place.

Rural Water Conference: Recorder Braithwaite noted the Rural Water Conference coming up the end of February, and asked if anyone was interested in attending. She would like to know so she please let her know so she can get things booked..

UDOT Grants: Mayor Nay reported she is working on getting the right of way taken care of before she applies for the UDOT reimbursement on the Hwy 89 sidewalk project. She will continue to work on this. Councilmember Jensen reviewed a history of the street corner as well as the crossing guard lights that are placed on Main Street. He questioned the possibility of moving the crossing guard lights further up which may alleviate some of the problems seen at the school. Mayor Nay reported the work needed to be completed by July.

Councilmember Smith made the motion to adjourn. Councilmember Andersen seconded the motion. The motion passes with a 4-0 vote.

9:23 p.m. Adjourn

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Janell Braithwaite, City Recorder

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Lori Nay, Mayor

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Approval Date